WHAT IS CLAIMED IS:

1. A transmission of a working vehicle having an engine mounted on a bodywork frame such that a crankshaft of the engine is horizontally oriented perpendicular to the longitudinal direction of the vehicle, comprises:

an input shaft for receiving power of the engine through a continuously variable transmission;

an output shaft disposed in parallel with said input shaft;

a pair of left and right axles extended oppositely to each other and in parallel with said output shaft;

a differential connecting said left and right axles with each other in a differential manner;

a transmission housing containing said input shaft, said output shaft, said pair of axles and said differential;

a pair of left and right axle housings mounted onto left and right faces of said transmission housing respectively, said pair of left and right axle housings house said pair of left and right axles, and wherein said pair of left and right axle housings include mounting portions for mounting to the bodywork frame; and

a wet-type disc brake device provided around a portion of said left and right axles covered by said left and right axle housings.

2. The transmission of a working vehicle as set forth in claim 1, wherein said input shaft is displaced closer to the engine than said axles in the longitudinal direction of the vehicle.

3. The transmission of a working vehicle as set forth in claim 1, further comprising:

a drive train which can switch the rotational direction of said output shaft in relation to the rotational direction of said input shaft, wherein said drive train

drivingly connects said input shaft with a portion of said output shaft, and which is nearer to one end of said output shaft;

a prime rotary object provided on said output shaft nearer to the other end of said output shaft;

a follower rotary object serving as an input means of said differential, said follower rotary object being engaged with said prime rotary object; and

a centrifugal governor for changing the output of the engine according to the variation of the rotational speed of said input shaft, said centrifugal governor being disposed at a portion of said input shaft facing toward said prime rotary object.

4. The transmission of a working vehicle as set forth in claim 1, further comprising:

a pair of left and right transmission housing parts into which said transmission housing is laterally dividable through a surface which is perpendicular to a longitudinal direction of said axles, wherein said differential is supported at its left and right portions by said left and right transmission housing parts, respectively; and

bearings provided at outer ends of said respective axle housings, wherein said bearings support outward portions of said axles projecting leftward and rightward from said differential.

5. The transmission of a working vehicle as set forth in claim 1, wherein a portion of at least one of said axle housings to be attached to said transmission housing is expanded so as to be bowl-like shaped,

wherein said wet-type disc brake is disposed in the bowl-like shaped portion of said axle housing, and

wherein an arm for operating said wet-type disc brake is disposed outside the bowl-like shaped portion of said axle housing.

6. A transmission of a working vehicle, comprising:

a differential;

a transmission housing containing said differential;

a pair of left and right axles connected with each other in a differential manner by said differential;

an axle housing mounted onto one of left and right faces of said transmission housing to support one of said left and right axles, wherein a joint space is formed in a joint portion between said transmission housing and said axle housing;

a differential locking slider which can switch between a differential mode for connecting said left and right axles with each other in a differential manner and a differential-locking mode for integrally connecting said left and right axles;

a friction disc provided on at least one of said left and right axles and housed by said axle housing; and

a pressure member which pushes said friction disc so as to engage said at least one of said left and right axles with said axle housing, thereby braking said at least one of said left and right axles, wherein said pressure member and said differential locking slider are disposed substantially coaxially with each other in said joint space.

7. The transmission of a working vehicle as set forth in claim 6, wherein:

a guide portion for axially slidably supporting said pressure member is provided in a flanged portion formed on an outer side wall of said transmission housing for mounting said axle housing,

said differential locking slider is disposed in said guide portion, and

a round wall of said guide portion is partly notched, forming a notch portion such that an arm for operating said differential locking slider is inserted through said notched portion.

8. The transmission of a working vehicle as set forth in claim 7, wherein:

said pressure member is rotatable along said round wall of said guide portion by a brake operating shaft supported by said axle housing, and

a cam body, which thrusts said pressure member in correspondence to as rotational degree of said pressure member, is supported around said round wall of said guide portion.

9. The transmission of a working vehicle as set forth in claim 8, wherein:

a rotational axis of said arm for operating said differential locking slider is disposed at a position which is offset from a virtual plane containing the rotational axis of said pressure member, and

said brake operating shaft is placed in parallel with said left and right axles on a opposite side to said arm with the virtual plane between.

10. The transmission of a working vehicle as set forth in claim 6, further comprising:

an input shaft projecting outward from one of left and right sides of said transmission housing; and

a follower pulley constituting a belt-type continuously variable transmission disposed onto an outward projecting portion of said input shaft,

wherein said differential locking slider is disposed at a position nearer to the other of said left and right sides of said transmission housing.